

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

WIRTGEN AMERICA, INC.,

Plaintiff/Counterclaim-Defendant,

v.

CATERPILLAR INC.,

Defendant/Counterclaim-Plaintiff.

C.A. No. 17-770-JDW

**PLAINTIFF'S OPENING BRIEF IN SUPPORT OF MOTION FOR
JUDGMENT ON THE PLEADINGS THAT THE '538 PATENT IS INVALID**

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TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	OVERVIEW OF THE '538 PATENT.....	1
III.	LEGAL STANDARD.....	4
IV.	ARGUMENT	6
A.	<i>Alice</i> step one: claim 13 is directed to the abstract idea of selecting the operating conditions of a machine to optimize fuel efficiency while maintaining rotor speed.....	6
B.	<i>Alice</i> step two: claim 13 lacks an inventive concept because it merely recites implementing the abstract idea using generic hardware and computer functionality.	11
V.	CONCLUSION.....	14

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Aatrix Software, Inc. v. Green Shades Software, Inc.</i> , 882 F.3d 1121 (Fed. Cir. 2018).....	11
<i>Affinity Labs of Tex., LLC v. Amazon.com Inc.</i> , 838 F.3d 1266 (Fed. Cir. 2016).....	6
<i>Affinity Labs of Tex., LLC v. DIRECTV, LLC</i> , 838 F.3d 1253 (Fed. Cir. 2016).....	<i>passim</i>
<i>AGI Suretrack LLC v. Farmers Edge Inc.</i> , No. 8:22CV275, 2024 WL 1578164 (D. Neb. Apr. 11, 2024)	8
<i>Alice Corp. Pty. Ltd. v. CLS Bank Int’l</i> , 573 U.S. 208 (2014).....	5, 11
<i>American Axle & Mfg., Inc. v. Neapco Holdings LLC</i> , 967 F.3d 1285 (Fed. Cir. 2020).....	1, 6, 10, 13
<i>Atos, LLC v. Allstate Ins. Co.</i> , No. 20-cv-06224, 2021 WL 6063963 (N.D. Ill. Dec. 22, 2021).....	8
<i>Bell Atl. Corp. v. Twombly</i> , 550 U.S. 544 (2007).....	6
<i>Berkheimer v. HP Inc.</i> , 881 F.3d 1360 (Fed. Cir. 2018).....	6
<i>BoardActive Corp. v. Foursquare Labs, Inc.</i> , No. 22-cv-597-JDW, 2023 WL 2587688 (D. Del. Mar. 21, 2023)	5, 6
<i>Certain Road Construction Machs. & Components Thereof</i> , Comm’n Op., Inv. No. 337-TA-1088, 2019 WL 6003332 (July 15, 2019).....	14
<i>Certain Road Construction Machs. & Components Thereof</i> , Inv. No. 337-TA-1088, 2018 WL 2459016 (May 24, 2018)	14
<i>Chamberlain Grp., Inc. v. Techtronic Indus. Co.</i> , 935 F.3d 1341 (Fed. Cir. 2019).....	12, 13
<i>ChargePoint, Inc. v. SemaConnect, Inc.</i> , 920 F.3d 759 (Fed. Cir. 2019).....	8, 9, 10, 13

<i>Chewy, Inc. v. Int’l Bus. Machs. Corp.</i> , 94 F.4th 1354 (Fed. Cir. 2024)	12
<i>Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n</i> , 776 F.3d 1343 (Fed. Cir. 2014).....	11
<i>Electric Power Grp., LLC v. Alstom S.A.</i> , 830 F.3d 1350 (Fed. Cir. 2016).....	<i>passim</i>
<i>FairWarning IP, LLC v. Iatric Sys., Inc.</i> , 839 F.3d 1089 (Fed. Cir. 2016).....	6
<i>General Elec. Co. v. Wabash Appliance Corp.</i> , 304 U.S. 364 (1938).....	3
<i>iLife Techs., Inc. v. Nintendo of Am., Inc.</i> , 839 F. App’x 534 (Fed. Cir. 2021)	8
<i>Intellectual Ventures I LLC v. Symantec Corp.</i> , 838 F.3d 1307 (Fed. Cir. 2016).....	4
<i>Interval Licensing LLC v. AOL, Inc.</i> , 896 F.3d 1335 (Fed. Cir. 2018).....	11
<i>Le Roy v. Tatham</i> , 55 U.S. (14 How.) 156 (1852)	1
<i>MG Freesites Ltd. v. ScorpCast LLC</i> , 651 F. Supp. 3d 744 (D. Del. 2023).....	4
<i>Money Suite Co. v. 21st Century Ins. & Fin. Servs., Inc.</i> , No. 13-1748-GMS, 2015 WL 436160 (D. Del. Jan. 27, 2015)	5
<i>Riggs Tech. Holdings, LLC v. Cengage Learning, Inc.</i> , No. 2022-1468, 2023 WL 193162 (Fed. Cir. Jan. 17, 2023).....	6
<i>SAP Am., Inc. v. InvestPic, LLC</i> , 898 F.3d 1161 (Fed. Cir. 2018).....	8, 9, 13
<i>Sensormatic Elecs., LLC v. Wyze Labs, Inc.</i> , No. 2020-2320, 2021 WL 2944838 (Fed. Cir. July 14, 2021).....	12
<i>Sikirica v. Nationwide Ins. Co.</i> , 416 F.3d 214 (3d Cir. 2005).....	4
<i>T-Jat Sys. 2006 Ltd. v. Expedia, Inc. (DE)</i> , No. 16-cv-581-RGA, 2019 WL 3944014 (D. Del. Aug. 21, 2019).....	3

Ultramercial, Inc. v. Hulu, LLC,
772 F.3d 709 (Fed. Cir. 2014).....6

University of Fla. Rsch. Found., Inc. v. General Elec. Co.,
916 F.3d 1363 (Fed. Cir. 2019).....8

Yu v. Apple Inc.,
1 F.4th 1040 (Fed. Cir. 2021)11, 12

Statutes

35 U.S.C. § 1015, 6, 8, 14

Other Authorities

Fed. R. Civ. P. 12(c)4

Fed. R. Civ. P. 12(b)(6).....5

I. Introduction

“The Supreme Court has long held that claims that state a goal without a solution are patent ineligible.” *American Axle & Mfg., Inc. v. Neapco Holdings LLC*, 967 F.3d 1285, 1295 (Fed. Cir. 2020). That is because “claiming a concept without the particular steps of carrying it out ‘would prohibit all other persons from making the same thing by any means whatsoever.’” *Id.* at 1295–96 (quoting *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 174–75 (1852)). That is precisely what Caterpillar’s ’538 patent attempts to do.

Claim 13—the only remaining asserted claim—covers a machine with (i) an engine, (ii) a variable transmission, (iii) a rotor, (iv) a clutch, and (v) a controller that is “configured to” adjust the engine speed and gear ratio to both maintain the desired rotor speed and maximize fuel efficiency. The physical components of the claim—engine, transmission, rotor, clutch, controller—are all indisputably conventional. The purportedly novel aspect of the claim is a *result*—the machine is operated in a more fuel-efficient manner by adjusting engine speeds and gear ratios. But the claim does not describe any concrete means by which that result is achieved (nor does the specification). Claims like this—that “simply instruct[] the reader to” adjust certain variables “to achieve a claimed result, without limitation to particular ways to do so”—are not patent-eligible. *Id.* at 1298. Wirtgen therefore requests that the Court grant judgment on the pleadings that claim 13 of the ’538 patent is invalid.

II. Overview of the ’538 Patent

U.S. Patent No. 9,975,538 “generally relates to milling machines,” and more specifically to “controlling the rotor speeds of cold planers and rotary mixers with optimized performance and fuel efficiency.” D.I. 62, Ex. 3 (’538 patent) 1:6–9. The patent states that “changes in engine speed and engine load throughout the operation can cause unwanted variations in the rotor speed” of the machine, but acknowledges that the prior art solved this problem via “variable

transmissions which allow for variations in the engine speed without affecting rotor speed.” *Id.*

1:28–37.¹ “However,” the patent explains, “these conventional systems do not further address fuel efficiency.” *Id.* 1:37–38. “Accordingly, there is a need for improved solutions for controlling and maintaining a desired rotor speed of a milling machine, which also takes fuel consumption or efficiency into consideration.” *Id.* 1:41–44. The patent purports to meet this need by disclosing “a controller-implemented method of controlling a machine having a rotor coupled to an engine through a variable transmission” that includes “receiving a desired rotor speed, determining an engine load of the engine, adjusting an engine speed of the engine based on the engine load and one or more predefined efficiency points, and adjusting a gear ratio of the variable transmission based on the engine speed and the desired rotor speed.” *Id.* 1:52–60.

The specification’s description of this method, however, is result-oriented and functional. A generic controller “communicates with the engine to adjust engine speed based on changes in the engine load and predefined efficiency points for better fuel economy,” and “further communicates with the [transmission] to adjust the gear ratio based on changes in the engine speed for more consistent rotor speeds.” *Id.* 4:31–37; *see id.* 3:21–29 (controller “may be implemented using one or more of a processor, a microprocessor, a microcontroller, an electronic control module (ECM), an electronic control unit (ECU), and any other suitable means” for receiving inputs and controlling the milling machine). The “predefined efficiency points” are described as “combinations of engine speed and engine load expected to provide relatively better fuel economy,” *id.* 4:16–18, but the patent does not identify any such combinations or explain how they should be determined. The patent states that the controller “may be configured to

¹ As the Court’s *Markman* opinion observed, the “technical understanding” of variable transmissions as transmissions that “can change to provide varying speeds or ratios” “is so common, it has made its way into common dictionaries, not just technical ones.” D.I. 167 at 17.

control rotor speeds and optimize fuel efficiency based on algorithms or sets of instructions programmed therein,” *id.* 4:37–40, but provides no details of any such algorithms or instructions. Instead, the patent simply discloses a high-level block-diagram that recites the functions of an exemplary algorithm without specifying how those functions are achieved. *See id.* Fig. 5. Particularly telling on this score is the patent’s use of the passive voice when describing the crux of the claimed method (i.e., actually calibrating the relevant parameters to maximize fuel efficiency): “Once the optimum engine speed, or the engine speed expected to provide the optimum fuel efficiency *has been determined* for the given engine load, the controller ... may compare the actual engine speed to the optimum engine speed.” *Id.* 5:12–17 (emphasis added). The patent does not explain how that “determin[ation]” is actually made. *Cf. T-Jat Sys. 2006 Ltd. v. Expedia, Inc. (DE)*, No. 16-cv-581-RGA, 2019 WL 3944014, at *6 (D. Del. Aug. 21, 2019) (“It is a well-known danger of functional claiming that the patentee ‘uses conveniently functional language at the exact point of novelty.’”) (quoting *General Elec. Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 371 (1938)).

Although the embodiments disclosed in the ’538 patent are milling machines, the claims are not so limited: they cover *any* machine having *any* type of rotor coupled to an engine and a variable transmission. And, because a “rotor” could be any rotatable component (for example, a shaft) driven by an engine, including a vehicle drive axle, the claims are broad enough to cover not just road-construction machines but road vehicles as well—cars, trucks, buses, or even a snowplow. Claim 13 depends from claim 6. Those claims recite as follows:

6. A machine, comprising:
 - an engine;
 - a variable transmission operatively coupled to an output of the engine;
 - a rotor operatively coupled to an output of the variable transmission;

and

a controller in electrical communication with one or more of the engine, variable transmission, and the rotor, the controller being configured to determine an engine load, adjust an engine speed based on the engine load and one or more predefined efficiency points being based at least partially on predetermined fuel consumption rates and proving optimum engine speeds for different engine loads, and adjust a gear ratio of the variable transmission based on the engine speed to maintain a desired rotor speed.

13. The machine of claim 6, further comprising a clutch disposed between the engine and the rotor, the controller being configured to selectively disengage the rotor from the engine through control of the clutch.

In plainspoken terms, claim 13 covers any machine with (i) an engine, (ii) a variable transmission, (iii) a rotor, (iv) a clutch, and (v) a controller that can adjust the engine speed based on the engine load and “predefined efficiency points” to optimize fuel efficiency and then adjust the gear ratio of the transmission based on the engine speed to maintain a constant rotor speed.²

III. Legal Standard

Judgment on the pleadings. Judgment on the pleadings under Federal Rule of Civil

Procedure 12(c) is appropriate if “the movant clearly establishes there are no material issues of fact, and he is entitled to judgment as a matter of law.” *Sikirica v. Nationwide Ins. Co.*, 416 F.3d 214, 220 (3d Cir. 2005). “In deciding a motion for judgment on the pleadings, a court may only consider the complaint, exhibits attached to the complaint, matters of public record, as well as undisputedly authentic documents if the complainant's claims are based upon these documents.”

MG Freesites Ltd. v. ScorpCast LLC, 651 F. Supp. 3d 744, 751 (D. Del. 2023) (cleaned up). Rule

² This brief focuses on claim 13 because it is the only asserted claim from this patent. In any event, however, claim 13 is representative of all claims of the patent. Independent claim 1 is a method claim with limitations largely mirroring the limitations of machine claim 6, and the other dependent claims add trivial limitations such as, for example, that the machine receives a desired rotor speed “through an operator interface of the machine” (claim 2). *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1316 n.9 (Fed. Cir. 2016).

12(c) motions are analyzed under the same standard applicable to motions to dismiss under Rule 12(b)(6). *Money Suite Co. v. 21st Century Ins. & Fin. Servs., Inc.*, No. 13-1748-GMS, 2015 WL 436160, at *1 n.1 (D. Del. Jan. 27, 2015).

Patent eligibility. “An invention is patent-eligible if it claims a ‘new and useful process, machine, manufacture, or composition of matter.’” *BoardActive Corp. v. Foursquare Labs, Inc.*, No. 22-cv-597-JDW, 2023 WL 2587688, at *3 (D. Del. Mar. 21, 2023) (Wolson, J.) (quoting 35 U.S.C. § 101). But the Supreme Court “has long interpreted Section 101 to contain an implicit exception: ‘laws of nature, natural phenomena, and abstract ideas’ are not patentable.” *Id.* (quoting *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014)). “[T]he concern that drives this exclusionary principle [i]s one of pre-emption.” *Alice*, 573 U.S. at 216. “Laws of nature, natural phenomena, and abstract ideas are the basic tools of scientific and technological work.” *Id.* (cleaned up). And the patent laws should “not inhibit further discovery by improperly tying up the future use of these building blocks of human ingenuity.” *Id.*

To determine whether claimed subject matter is patent-eligible, the Court applies the two-step *Alice* framework. *Id.* at 217–18. First, the Court “determine[s] whether the claims at issue are directed to a patent-ineligible concept,” such as an abstract idea or natural law. *Id.* at 218. If so, the Court “examine[s] the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 221. The Federal Circuit has explained that step one looks at the “focus of the claims [and] their character as a whole,” while step two looks “more precisely at what the claim elements add—specifically, whether ... they identify an inventive concept in the application of the ineligible matter to which ... the claim is directed.” *Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (cleaned up). “[C]laims that state a goal without a

solution” are often deemed ineligible under this framework. *American Axle*, 967 F.3d at 1295.

“Patent validity under Section 101 is a question of law suitable for resolution on a motion to dismiss” or a motion for judgment on the pleadings. *BoardActive*, 2023 WL 2587688, at *3. Indeed, “[f]ailure to recite statutory subject matter is the sort of ‘basic deficiency’ that can, and should, ‘be exposed at the point of minimum expenditure of time and money by the parties and the court.’” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 718–19 (Fed. Cir. 2014) (Mayer, J., concurring) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 558 (2007)). While the eligibility inquiry may sometimes involve underlying issues of fact, such as “whether a claim element or combination of elements is well-understood, routine and conventional,” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367–68 (Fed. Cir. 2018), the patent itself will often demonstrate that the claims involve only well-understood, routine and conventional activity. *See, e.g., Riggs Tech. Holdings, LLC v. Cengage Learning, Inc.*, No. 2022-1468, 2023 WL 193162, at *4 (Fed. Cir. Jan. 17, 2023) (affirming grant of motion to dismiss and noting that, “where the specification admits ... claim elements are well-understood, routine, and conventional, it will be difficult, if not impossible, for a patentee to show a genuine dispute”). Thus, “in many cases it is possible and proper” to determine patent eligibility on the pleadings. *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016). Moreover, in analyzing eligibility, courts may take judicial notice of “fundamental economic concepts and technological developments.” *Affinity Labs of Tex., LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1270 (Fed. Cir. 2016).

IV. Argument

A. Alice step one: claim 13 is directed to the abstract idea of selecting the operating conditions of a machine to optimize fuel efficiency while maintaining rotor speed.

Claim 13 is directed to the abstract idea of selecting operating conditions of a machine—namely, engine speed and gear ratio—to optimize fuel efficiency while maintaining a constant

rotor speed. The physical components recited in the claim—an engine, a variable transmission, a rotor, a controller, and a clutch—are indisputably generic and conventional. Road-construction machines have had these features for decades. *See generally* ’538 patent 1:13–48; *see id.* 1:20–22, 2:67–3:2 (engine); *id.* 1:34–37, 2:63–67 (variable transmission); *id.* 1:13–28 (rotor); *id.* 3:21–29 (controller); *id.* 3:30–50 (clutch). The purported novelty of the claimed machine, to the extent there is any, must lay in the result that the controller uses information about the machine’s operating condition and “predefined efficiency points” to optimize fuel efficiency while maintaining rotor speed. *See id.* 1:37–40, 1:55–60. But that result is just that—a result. The claim does not specify any concrete *means* by which that result is achieved. The claim is therefore directed to an ineligible concept at step one.

The Federal Circuit’s decision in *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253 (Fed. Cir. 2016), is instructive. The claim there covered “a broadcast system in which a cellular telephone located outside the range of a regional broadcaster (1) requests and receives network-based content from the broadcaster via a streaming signal, (2) is configured to wirelessly download an application for performing those functions, and (3) contains a display that allows the user to select particular content.” *Id.* at 1256. The court held that the claim was directed to the abstract “concept of providing out-of-region access to regional broadcast content.” *Id.* at 1258. Because the patent “claim[ed] the function of wirelessly communicating regional broadcast content to an out-of-region recipient, not a particular way of performing that function,” it was “drawn to the idea itself” and therefore directed to an abstract idea. *Id.*

A similar conclusion is appropriate here. The invention of claim 13 is “entirely functional in nature.” *Id.* It recites a controller “configured” to accept as inputs certain information about the milling machine and “predefined efficiency points” and then use that information to optimize

fuel efficiency while maintaining a constant rotor speed. But “[t]here is nothing in claim 1[3] that is directed to *how to*” accomplish that result. *Id.*; see also *University of Fla. Rsch. Found., Inc. v. General Elec. Co.*, 916 F.3d 1363, 1368 (Fed. Cir. 2019) (finding claim “described in purely *functional* terms” ineligible at the pleadings stage) (emphasis in original). Instead, the claim simply covers the collection and analysis of information, applied to a particular technological context but described at a high level of generality. Those sorts of claims are ineligible, as the Federal Circuit has routinely held. See *iLife Techs., Inc. v. Nintendo of Am., Inc.*, 839 F. App’x 534, 536 (Fed. Cir. 2021) (finding claim that “merely amount[ed] to a system capable of sensing information, processing the collected information, and transmitting processed information” directed to an abstract idea); *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (“[C]laims focused on ‘collecting information, analyzing it, and displaying certain results of the collection and analysis’ are directed to an abstract idea.”) (quoting *Electric Power Grp.*, 830 F.3d at 1353). The claim therefore fails step one.³

The § 101 analysis must always remain focused on the claim language, “and the specification cannot be used to import details from the specification if those details are not claimed.” *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 769 (Fed. Cir. 2019). That is because “[e]ven a specification full of technical details about a physical invention may nonetheless conclude with claims that claim nothing more than the broad law or abstract idea underlying the claims, thus preempting all use of that law or idea.” *Id.* Here, however—as in

³ See also *AGI Suretrack LLC v. Farmers Edge Inc.*, No. 8:22CV275, 2024 WL 1578164, at *6 (D. Neb. Apr. 11, 2024) (claims that “use[d] generic (‘off the shelf’) computers and sensors to collect data from standard farm implements” and analyze that data were directed to an abstract idea); *Atos, LLC v. Allstate Ins. Co.*, No. 20-cv-06224, 2021 WL 6063963, at *9 (N.D. Ill. Dec. 22, 2021) (finding claims covering a method of “detecting the motion or state of a vehicle and taking a corresponding action” directed to an abstract idea because the claim failed to “provide[] technical details as to how this monitoring or analysis should be accomplished”).

Affinity Labs v. DIRECTV—“[e]ven if all the details contained in the specification were imported into the ... claims, the result would still not be a concrete implementation of the abstract idea.”

838 F.3d at 1259. On the contrary, “the specification underscores the breadth and abstract nature of the idea embodied in the claims” by describing the claimed invention “at a high level of generality.” *Id.* For example, the patent states that the controller

- “receive[s] a desired rotor speed from the operator”;
- “monitor[s] or determine[s] the current engine speed and current engine load” using a generic “sensor”;
- “refer[s] to predefined fuel efficiency points ... *or any other predetermined information pertaining to the fuel consumption characteristics of the milling machine*” stored in a generic “memory” to “determine an optimum engine speed for the given engine load”; and
- “compare[s] the actual engine speed to the optimum engine speed” “[o]nce the optimum engine speed ... has been determined for the given engine load.”

’538 patent 5:1–17 (emphasis added). “Nothing in [this discussion] provides any details regarding the manner in which the invention accomplishes the recited functions.” *Affinity Labs v. DIRECTV*, 838 F.3d at 1260. These generic computer functions do nothing to improve the underlying technology, placing the claims in “the familiar class of claims that do not ‘focus ... on [] an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.’” *SAP Am.*, 898 F.3d at 1168.

The only clue the patent provides about how to determine optimum engine speeds is that these determinations are based on “predefined efficiency points.” But, aside from stating that the “predefined efficiency points” are “preprogrammed,” ’538 patent 4:18–23, the patent does not describe any steps for deriving this data or creating the data structure in which it is contained. In other words, the “invention” here is just the idea to use any helpful data—that is, “any ... predetermined information pertaining to ... fuel consumption characteristics,” *id.* 5:9–10—to

(somehow) determine the optimum engine speed and then (somehow) adjust both the engine speed and the gear ratio to achieve that engine speed while maintaining the preferred rotor speed. That may be a “good idea”—but the idea “is where [the inventor] stopped, and that is all [he] patented.” *ChargePoint*, 920 F.3d at 770. Such “ideas” are not patentable. *See id.* at 768–71 (holding that patents to controller-operated networked charging station were directed to “the abstract idea of communication over a network for interacting with a device, applied to the context of electric vehicle charging stations,” and that specifying “the content of the communications received by the charging station” did not make the claims any less abstract).

The Federal Circuit’s decision in *American Axle* provides a useful illustration of this point (albeit in the natural-law context rather than the abstract-idea one). A claim in that case covered a method for manufacturing an automobile drive shaft that involved “tuning a mass and a stiffness” of a liner for the shaft that would dampen both shell-mode and bending-mode vibration. 967 F.3d at 1290. The Federal Circuit held that this claim was ineligible because it “define[d] a goal (‘tuning a liner’ to achieve certain types of vibration attenuation)” without specifying how the goal was achieved. *Id.* at 1293–94. “[C]laims that state a goal without a solution,” the court explained, “are patent ineligible.” *Id.* at 1295–96 & n.7 (collecting cases applying this principle in the abstract-idea context). And that was all the claim at issue did—it did “not specify how target frequencies are determined or how, using that information, liners are tuned to attenuate two different vibration modes simultaneously, or how such liners are tuned to dampen bending mode vibrations.” *Id.* at 1298. It simply “instruct[ed] the reader to tune the liner to achieve a claimed result, without limitation to particular ways to do so.” *Id.* The claim thus “invoke[d] a natural law, and nothing more, to achieve a claimed result.” *Id.*

Similar analysis applies here. Claim 13 does not specify how to identify any “predefined

efficiency points” or how to use that information along with the machine’s operating parameters to adjust engine speed and gear ratio to optimize fuel efficiency while maintaining rotor speed. It simply instructs the reader to achieve that claimed result. The claim is therefore directed to the abstract idea of selecting the operating conditions of a machine to optimize fuel efficiency while maintaining rotor speed.

B. *Alice* step two: claim 13 lacks an inventive concept because it merely recites implementing the abstract idea using generic hardware and computer functionality.

Claim 13 also fails at step two because the recited combination of conventional elements—the machine, engine, rotor, variable transmission, clutch, and controller—fail to transform the abstract idea into patent eligible-subject matter. Step two requires analyzing “the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221. To qualify as an inventive concept, an element or combination of elements must supply more than something well-known, routine, or conventional. *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014).

To survive step two, an inventive concept must be evident not just in the specification, but in the claims. *Yu v. Apple Inc.*, 1 F.4th 1040, 1045 (Fed. Cir. 2021). If the claims recite a purportedly beneficial result, courts look to whether they also recite “how the desired result is achieved.” *Electric Power*, 830 F.3d at 1355; see *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1346 (Fed. Cir. 2018) (finding no inventive concept because the patent was “devoid of details which describe *how* th[e purported benefit of the invention was] accomplished”) (emphasis in original).

None of claim 13’s elements, individually or in combination, supplies an inventive

concept. All the hardware recited in the claims is indisputably conventional, as described above. The engine, transmission, rotor, controller, and clutch “merely serve as a ‘conduit for the abstract idea’” of selecting operating parameters to optimize fuel efficiency. *Yu*, 1 F.4th at 1045; *see also Affinity Labs v. DIRECTV*, 838 F.3d at 1262 (finding no inventive concept where “the claim simply recite[d] the use of generic features of cellular telephones, such as a storage medium and a graphical user interface, as well as routine functions, such as transmitting and receiving signals, to implement the underlying idea”). And the functions of the controller—given the high level of generality at which they are specified—are simply conventional data-management functions that any generic computer could accomplish. *See Sensormatic Elecs., LLC v. Wyze Labs, Inc.*, No. 2020-2320, 2021 WL 2944838, at *3 (Fed. Cir. July 14, 2021) (“Providing generic devices that communicate with each other ... is a conventional application of an abstract idea.”); *Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341, 1349 (Fed. Cir. 2019) (declining to find an inventive concept where “transmitting information wirelessly was conventional at the time the patent was filed and could be performed with off-the-shelf technology”); *Electric Power*, 830 F.3d at 1355 (declining to find an inventive concept where “[n]othing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information”). “The claims in this case do not even require a new source or type of information, or new techniques for analyzing it.” *Id.* And “[u]sing a generic database to store the information used in correlating” recited information “is not an inventive concept.” *Chewy, Inc. v. Int’l Bus. Machs. Corp.*, 94 F.4th 1354, 1366–67 (Fed. Cir. 2024).

In short, this case is squarely resolved by the Federal Circuit’s repeated holdings that generic data management processes fail to recite an inventive concept, regardless of the specific

tangible system in which they may be implemented. *See, e.g., Electric Power*, 830 F.3d at 1354–56; *Affinity Labs v. DIRECTV*, 838 F.3d at 1262–65; *SAP Am.*, 898 F.3d at 1169–70; *Chamberlain*, 935 F.3d at 1346. Using a generic controller to process information faster and more efficiently than a human could is not a patent-eligible invention, *see Electric Power*, 830 F.3d at 1354–56, and that remains true if the controller is implemented in a conventional road-construction machine with conventional components.

To the extent Caterpillar argues that the controller’s ability to purportedly achieve improved fuel efficiency constitutes an inventive concept, Caterpillar is wrong. “Th[at] amounts to no more than a restatement of the assertion that the desired results are an advance.” *American Axle*, 967 F.3d at 1299. And “a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept required to cross the line into eligibility.” *Id.* (cleaned up); *see also ChargePoint*, 920 F.3d at 774 (“[T]he alleged ‘inventive concept’ that solves problems identified in the field is that the charging stations are network-controlled. But network control is the abstract idea itself....”). “The real inventive work” here—to the extent there is any to be done—would lie in “figuring out *how* to” optimize a machine’s operating parameters to improve its fuel efficiency while maintaining a desired rotor speed. *American Axle*, 967 F.3d at 1299 (emphasis added). But Caterpillar did not claim the “how”; instead, Caterpillar claimed the result itself, along with “conventional pre- and post-solution activity” involving well-known machine components and generic computer functionality. *Id.* “There is no other inventive concept at step two in the claim[] and no dispute of any material fact.” *Id.*

Ultimately, claim 13 is “so result-focused, so functional, as to effectively cover any solution to [the] identified problem” of selecting an engine speed to maximize fuel efficiency and adjusting the transmission to produce a desired rotor speed based on that engine speed. *Affinity*

Labs v. DIRECTV, 838 F.3d at 1265 (quoting *Electric Power*, 830 F.3d at 1356). Describing “purely conventional features” of milling machines and “the applications that enable them to perform particular functions” does not “meaningfully limit the scope of the claims.” *Id.* Claim 13 poses precisely the sort of preemption danger that patent-eligibility doctrine is designed to guard against.⁴

V. Conclusion

For these reasons, Wirtgen respectfully requests that the Court find claim 13 of the ’538 patent ineligible under 35 U.S.C. § 101 and dismiss Caterpillar’s infringement allegations on that patent with prejudice.

⁴ Notably, this is not the first time that Caterpillar has asserted a road-construction patent of dubious eligibility against Wirtgen. In a 2018 ITC proceeding, Caterpillar accused Wirtgen of infringing a patent on a paving machine with a “generic electronic controller that permits coordination and control of the various systems and components associated with the paving machine.” *Certain Road Construction Machs. & Components Thereof*, Order No. 18, Inv. No. 337-TA-1088, 2018 WL 2459016, at *8 (May 24, 2018). An ALJ found the claims of that patent ineligible because it claimed “the abstract idea of collecting, analyzing, storing and displaying information about a paving machine so that the information can be reproduced, accurately and efficiently, for use in future paving,” *id.* at *9, and “describe[d] no innovative system for implementing the invention,” *id.* at *14. “The key element of the invention,” the ALJ explained (in language that should sound familiar here), was “the controller, which is depicted as a box and described in a non-specific and non-technological algorithm.” *Id.* at *14. The Commission affirmed the ALJ’s ineligibility finding. *See Certain Road Construction Machs. & Components Thereof*, Comm’n Opinion, Inv. No. 337-TA-1088, 2019 WL 6003332, at *5–10 (July 15, 2019).

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